

WHAT IS CLAIMED IS:

1. An absorbent article for alerting a wearer to urination comprising a bodyside liner, an absorbent core, and a urine-permeable inflatable envelope located between the bodyside liner and the absorbent core, the urine-permeable inflatable envelope comprising a surfactant and a system capable of generating carbon dioxide upon being wetted with urine.

2. The absorbent article as set forth in claim 1 wherein the system capable of generating carbon dioxide upon being wetted with urine comprises an acid and a base.

3. The absorbent article as set forth in claim 2 wherein the acid is potassium bitartrate and the base is sodium bicarbonate.

4. The absorbent article as set forth in claim 2 wherein the acid is sodium aluminum sulfate and the base is sodium bicarbonate.

5. The absorbent article as set forth in claim 2 wherein the acid, base, and surfactant are encapsulated.

6. The absorbent article as set forth in claim 1 wherein the surfactant is selected from the group consisting of anionic surfactants, nonionic surfactants, amphoteric surfactants, cationic surfactants, and combinations thereof.

7. The absorbent article as set forth in claim 6 wherein the anionic surfactants are selected from the group consisting of alkyl benzene sulfonates, alkyl sulfates, alkyl ether sulfates, sulfosuccinates, and combinations thereof.

8. The absorbent article as set forth in claim 6 wherein the nonionic surfactants are selected from the group consisting of ethoxylated alcohols, fatty acid alkanolamides, ethoxylated alkanolamides, amine oxides, and combinations thereof.

9. The absorbent article as set forth in claim 6 wherein the amphoteric surfactants are selected from the group consisting of alkyl betaines, amidobetaines, and combinations thereof.

10. The absorbent article as set forth in claim 6 wherein the cationic surfactants are alkylammonium halides.

11. The absorbent article as set forth in claim 1 wherein the inflatable envelope comprises a spunbond nonwoven material.

12. The absorbent article as set forth in claim 1 wherein the inflatable envelope is attached to the absorbent core.

13. The absorbent article as set forth in claim 2 wherein the absorbent core comprises superabsorbent particles.

14. The absorbent article as set forth in claim 13 wherein the superabsorbent particles in the absorbent core are located at least about 1/8 inch from the inflatable envelope.

15. The absorbent article as set forth in claim 13 wherein the superabsorbent particles in the absorbent core are located at least about 1/4 inch from the inflatable envelope.

16. The absorbent article as set forth in claim 2 wherein the urine-permeable inflatable envelope comprises from about 0.1 grams to about 15 grams of acid, from about 0.1 grams to about 15 grams of base, and from about 0.1 grams to about 15 grams of surfactant.

17. An absorbent article for alerting a wearer to urination comprising a bodyside liner, an absorbent core, and a urine-permeable inflatable envelope located between the bodyside liner and the absorbent core, the urine-permeable inflatable envelope comprising a surfactant and a system capable of generating a gas upon being wetted with urine.

18. The absorbent article as set forth in claim 17 wherein the system capable of generating a gas upon being wetted with urine comprises an effervescent solid material containing pressurized gas within cells located in the effervescent solid material.

19. The absorbent article as set forth in claim 18 wherein the effervescent solid material comprises a composition selected from the group consisting of sugars, salts, alkali halides, alkaline earth metal halides, and combinations thereof.

20. The absorbent article as set forth in claim 17 wherein the pressurized gas within the cells is selected from the group consisting of carbon dioxide, air, nitrogen, argon, helium, and combinations thereof.

21. The absorbent article as set forth in claim 18 wherein the effervescent solid material and surfactant are encapsulated.

22. The absorbent article as set forth in claim 17 wherein the surfactant is selected from the group consisting

of anionic surfactants, nonionic surfactants, amphoteric surfactants, cationic surfactants, and combinations thereof.

23. The absorbent article as set forth in claim 22 wherein the anionic surfactants are selected from the group consisting of alkyl benzene sulfonates, alkyl sulfates, alkyl ether sulfates, sulfosuccinates, and combinations thereof.

24. The absorbent article as set forth in claim 22 wherein the nonionic surfactants are selected from the group consisting of ethoxylated alcohols, fatty acid alkanolamides, ethoxylated alkanolamides, amine oxides, and combinations thereof.

25. The absorbent article as set forth in claim 22 wherein the amphoteric surfactants are selected from the group consisting of alkyl betaines, amidobetaines, and combinations thereof.

26. The absorbent article as set forth in claim 22 wherein the cationic surfactants are alkylammonium halides.

27. The absorbent article as set forth in claim 17 wherein the inflatable envelope comprises a spunbond nonwoven material.

28. The absorbent article as set forth in claim 17 wherein the inflatable envelope is attached to the absorbent core.

29. The absorbent article as set forth in claim 18 wherein the absorbent core comprises superabsorbent particles.

30. The absorbent article as set forth in claim 29 wherein the superabsorbent particles in the absorbent core

are located at least about 1/8 inch from the inflatable envelope.

31. The absorbent article as set forth in claim 29 wherein the superabsorbent particles in the absorbent core are located at least about 1/4 inch from the inflatable envelope.

32. The absorbent article as set forth in claim 18 wherein the urine-permeable inflatable envelope comprises from about 0.1 grams to about 15 grams of effervescent solid material and from about 0.1 grams to about 15 grams of surfactant.

33. An absorbent article for alerting a wearer to urination comprising a bodyside liner, an absorbent core, and a urine-permeable inflatable envelope located between the bodyside liner and the absorbent core, the inflatable envelope comprising a surfactant, a system capable of generating carbon dioxide upon being wetted with urine, and a temperature change agent.

34. The absorbent article as set forth in claim 33 wherein the system capable of generating carbon dioxide upon being wetted with urine comprises an acid and a base.

35. The absorbent article as set forth in claim 34 wherein the acid is potassium bitartrate and the base is sodium bicarbonate.

36. The absorbent article as set forth in claim 34 wherein the acid is sodium aluminum sulfate and the base is sodium bicarbonate.

37. The absorbent article as set forth in claim 34 wherein the acid, base, and surfactant are encapsulated.

38. The absorbent article as set forth in claim 33 wherein the surfactant is selected from the group consisting of anionic surfactants, nonionic surfactants, amphoteric surfactants, cationic surfactants, and combinations thereof.

39. The absorbent article as set forth in claim 38 wherein the anionic surfactants are selected from the group consisting of alkyl benzene sulfonates, alkyl sulfates, alkyl ether sulfates, sulfosuccinates, and combinations thereof.

40. The absorbent article as set forth in claim 38 wherein the nonionic surfactants are selected from the group consisting of ethoxylated alcohols, fatty acid alkanolamides, ethoxylated alkanolamides, amine oxides, and combinations thereof.

41. The absorbent article as set forth in claim 38 wherein the amphoteric surfactants are selected from the group consisting of alkyl betaines, amidobetaines, and combinations thereof.

42. The absorbent article as set forth in claim 38 wherein the cationic surfactants are alkylammonium halides.

43. The absorbent article as set forth in claim 33 wherein the inflatable envelope comprises a spunbond nonwoven material.

44. The absorbent article as set forth in claim 33 wherein the inflatable envelope is attached to the absorbent core.

45. The absorbent article as set forth in claim 34 wherein the absorbent core comprises superabsorbent particles.

46. The absorbent article as set forth in claim 45 wherein the superabsorbent particles in the absorbent core are located at least about 1/8 inch from the inflatable envelope.

47. The absorbent article as set forth in claim 45 wherein the superabsorbent particles in the absorbent core are located at least about 1/4 inch from the inflatable envelope.

48. The absorbent article as set forth in claim 34 wherein the urine-permeable inflatable envelope comprises from about 0.1 grams to about 15 grams of acid, from about 0.1 grams to about 15 grams of base, and from about 0.1 grams to about 15 grams of surfactant.

49. The absorbent article as set forth in claim 34 wherein the temperature change agent is selected from the group consisting of salt hydrates, anhydrous salts, and organic compounds.

50. The absorbent article as set forth in claim 49 wherein the salt hydrates are selected from the group consisting of sodium acetate ( $\text{H}_2\text{O}$ ), sodium carbonate ( $10 \text{ H}_2\text{O}$ ), sodium sulfate ( $10 \text{ H}_2\text{O}$ ), sodium thiosulfate ( $5 \text{ H}_2\text{O}$ ), sodium phosphate ( $10 \text{ H}_2\text{O}$ ), and combinations thereof.

51. The absorbent article as set forth in claim 49 wherein the anhydrous salts are selected from the group consisting of ammonium nitrate, potassium nitrate, ammonium chloride, potassium chloride, sodium bromide, magnesium chloride, calcium chloride, magnesium sulfate, sodium nitrate, and combinations thereof.

52. The absorbent article as set forth in claim 49 wherein the organic compounds are selected from the group consisting of urea, a sugar, and combinations thereof.

53. The absorbent article as set forth in claim 52 wherein the sugar is xylitol.